



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/607,593	06/30/2000	Stephen H. Houchen	CIS0070US	1182
24251	7590	09/07/2004	EXAMINER	
SKJERVEN MORRILL LLP			DUONG, FRANK	
25 METRO DRIVE				
SUITE 700			ART UNIT	PAPER NUMBER
SAN JOSE, CA 95110			2666	

DATE MAILED: 09/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/607,593	HOUCHEN, STEPHEN H.
	Examiner	Art Unit
	Frank Duong	2666

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

**A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM
 THE MAILING DATE OF THIS COMMUNICATION.**

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 30 June 2000.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-50 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) 1-18, 21-23 and 40-50 is/are allowed.
 6) Claim(s) 19, 20, 24-27, 30 and 31 is/are rejected.
 7) Claim(s) 28, 29 and 32-39 is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on 30 June 2000 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____ .
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>2/11/03</u> .	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____

DETAILED ACTION

1. This Office Action is a response to the communication dated 06/30/00. Claims 1-49 are pending in the application.

Information Disclosure Statement

2. The information disclosure statement filed 02/11/03 complies with the provisions of 37 CFR 1.97, 1.98 and MPEP § 609. It has been considered and placed in the application file.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 19-20, 24-27 and 30-31 are rejected under 35 U.S.C. 102(e) as being anticipated by Nguyen et al (USP 6,594,279) (hereinafter “Nguyen”).

Regarding **claim 19**, in accordance with Nguyen reference entirety, Nguyen discloses a destination node (14), wherein the destination node is operable to communicate with at least one neighboring node (12 or 14) in a network (Fig. 7), the destination node comprising:

a four fiber BLSR network interface operable to transmit packets and to receive packets (Fig. 8; element 10 and col. 5, lines 63-64); and

a processing unit (Fig. 8; element 36) in communication with the network interface (see connection depicted in Fig. 8), the processing unit being operable to receive a connect packet to establish cross-connects in a traffic route for the packets, wherein the destination node is operable to:

transmit the connect packet to the at least one neighboring node through the BLSR network interface (col. 5, line 67; *bandwidth allocation request*); and establish the cross-connects in the destination node (col. 5, line 65; *establishment of a connection between a source node and a destination node by sending out request*).

Regarding **claim 20**, in accordance with Nguyen reference entirety, Nguyen discloses a destination node (14), wherein the destination node is operable to communicate with at least one neighboring node (12 or 14) in a network (Fig. 7), the destination node comprising:

a four fiber BLSR network interface operable to transmit packets and to receive packets (Fig. 8; element 10 and col. 12, lines 1-2); and

a processing unit (Fig. 8; element 36) in communication with the network interface (see connection depicted in Fig. 8), the processing unit being operable to receive a disconnect packet to dismantle cross-connects in a traffic route for the packets, wherein the destination node is operable to:

transmit the disconnect packet to the at least one neighboring node through the BLSR network interface (col. 9, line 57; Bandwidth De-allocation); and remove the cross-connects in the destination node (col. 9, line 59; channel be released).

Regarding **claim 24**, in accordance with Nguyen reference entirety, Nguyen discloses an intermediate node, wherein the intermediate node (14) is operable to communicate with at least one neighboring node (12 or 14) in a network (Fig. 7), the intermediate node comprising:

a four fiber BLSR network interface operable to transmit packets and to receive packets (Fig. 8; element 10 and col. 12, lines 1-2); and

a processing unit (Fig. 8; element 36) in communication with the network interface, the processing unit being operable to receive a connect packet to establish cross-connects in a traffic route for the packets, wherein the intermediate node is operable to:

transmit the connect packet to the at least one neighboring node through the BLSR network interface (col. 5, line 67; *bandwidth allocation request*); and

establish the cross-connects in the intermediate node (col. 5, line 65; *establishment of a connection between a source node and a destination node by sending out request*).

Regarding **claim 25**, in accordance with Nguyen reference entirety, Nguyen discloses an intermediate node (14), wherein the intermediate node is operable to

communicate with at least one neighboring node (12 or 14) in a network (Fig. 7), the intermediate node comprising:

a four fiber BLSR network interface operable to transmit packets and to receive packets (Fig. 8; element 10 and col. 12, lines 1-2); and

a processing unit (Fig. 8; element 36) in communication with the network interface (see connection depicted in Fig. 8), the processing unit being operable to receive a disconnect packet to dismantle cross-connects in a traffic route for the packets, wherein the intermediate node is operable to:

transmit the disconnect packet to the at least one neighboring node through the BLSR network interface (col. 9, line 57; Bandwidth De-allocation); and

remove the cross-connects in the destination node (col. 9, line 59; channel be released).

Regarding **claim 26**, in accordance with Nguyen reference entirety, Nguyen discloses a method for provisioning a traffic route from a source node (14) wherein the source node (14) is operable to communicate with at least one neighboring node (12 or 14) in a network (Fig. 7), and packets are communicated along the traffic route (col. 5, line 55 to col. 7, line 5), the method comprising:

generating a request packet that includes a request to provision the traffic route for the packets (col. 5, line 67; bandwidth allocation request message);

and broadcasting the request packet to the at least one neighboring node (12 or 14) (col. 6, lines 63-64 or col. 6, lines 21-24 and col. 7, lines 31-44).

Regarding **claim 27**, in addition to features recited in base claim 26 (see rationales discussed above), Nguyen further discloses determining bandwidth required to establish cross-connects along the route (col. 10, lines 35-36 or lines 50-57).

Regarding **claim 30**, in addition to features recited in base claim 27 (see rationales discussed above), Nguyen further discloses wherein the network is a BLSR SONET network (col. 12, lines 1-2).

Regarding **claim 31**, in addition to features recited in base claim 27 (see rationales discussed above), Nguyen further discloses reserving bandwidth for communicating the request packet (col. 5, line 67).

Allowable Subject Matter

4. Claims 1-18, 21-23 are allowed.
5. Claims 28-29 and 32-39 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
6. The following is a statement of reasons for the indication of allowable subject matter:

The prior art of record considered individually or in combination fails to fairly show or suggest the claimed method of claims 1-14, comprising, among other limitations, the novel and unobvious limitation of "the request packet includes: a value indicating the number of nodes included in the route; a value indicating the number of rings included in the route; a sequence number for each node in the route with respect to the source node; an identifier for a destination node; and an identifier for each node

in the route”, structurally and functionally interconnected with other limitation in a manner as recited.

The prior art of record considered individually or in combination fails to fairly show or suggest the claimed method of claims 15-18, comprising, among other limitations, the novel and unobvious limitation of “the response packet includes: a value indicating the number of nodes included in the route; a value indicating the number of rings included in the route; an identifier for a destination node; a sequence number of each node in the route with respect to a source node; and an identifier for each node in the route”, structurally and functionally interconnected with other limitation in a manner as recited.

The prior art of record considered individually or in combination fails to fairly show or suggest the claimed method of claims 21-23, comprising, among other limitations, the novel and unobvious limitation of “wherein the intermediate node is operable to receive request packets, compare route information in the request packet with route information in the local data structure, and transmit the request packet when the route in the request packet has a lower cost than the route in the local data structure”, structurally and functionally interconnected with other limitation in a manner as recited.

Dependent claims 28-29 and 32-39 have novel limitation as claims 1-14 (see rationales discussed above).

The prior art of record considered individually or in combination fails to fairly show or suggest the claimed method of claims 40-41, comprising, among other

Art Unit: 2666

limitations, the novel and unobvious limitation of "the disconnect packet includes: a timeslot of a node included in a route to be dismantled; and a value indicating the bandwidth required to transmit the disconnect packet", structurally and functionally interconnected with other limitation in a manner as recited.

The prior art of record considered individually or in combination fails to fairly show or suggest the claimed method of claims 42-48, comprising, among other limitations, the novel and unobvious limitations of "receiving a request to provision the route in the destination node, wherein the request includes information regarding a candidate route; comparing the information regarding the candidate route to information regarding a previous route in the destination node; determining whether the candidate route has a lower cost than the previous route", structurally and functionally interconnected with other limitation in a manner as recited.

The prior art of record considered individually or in combination fails to fairly show or suggest the claimed method of claims 49-50, comprising, among other limitations, the novel and unobvious limitations of "receiving a response packet in the intermediate node, wherein the response packet includes information regarding a candidate route; comparing the information regarding the candidate route to information regarding a previous route in the intermediate node; determining whether the candidate route has a lower cost than the previous route in the intermediate node", structurally and functionally interconnected with other limitation in a manner as recited.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Lu (USP 5,412,652).

Chin et al (USP 6,314,110).

Ramaswami et al (USP 5,781,537).

Cidon et al (USP 5,446,737).

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frank Duong whose telephone number is (571) 272-3164. The examiner can normally be reached on 7:00AM-3:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on (571) 272-3174. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Application/Control Number: 09/607,593
Art Unit: 2666

Page 10



Frank Duong
Examiner
Art Unit 2666

September 2, 2004